Index of Claims



Application/Control No.

Applicant(s)/Patent under Reexamination

10/699,680

Examiner

JEAN, HYO SIG

Fred A. Casca

2617

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√ Rejected
= Allowed

(Through numeral)
Cancelled

Restricted

Non-Elected

Interference

Appeal

Objected

|          |  | <u> </u>   | Щ.   |  |                                     |            | ٠.   |  |  |                 |  |  |
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| CIA      | aim  | Date   |  |  |                                     |            |  |  |  |                 |  |  |
| LIE      |  | _  | $\overline{}$                                    |  | _                                   | Jate       | -  |  |  |                 |  |  |
| Final    | Original                                   | 3/18/07  |  |  |                                     |            |  |  |  |                 |  |  |
|          |  | <b>D</b> -                                       | Ш  |  |                                     |            | _  |  |  | $\dashv$        |  |  |
| ļ        | Ţ  | 777  | Н  | _  |                                     |            | <u> </u>   | L  | -  | $\dashv$        |  |  |
| <u> </u> | 2  | 7  | Н  | _  |                                     |            | -  |  | -  | $\dashv$        |  |  |
|          | 4  | 1  | Н  | _  | _                                   | H          | _  |  | $\vdash$   | $\dashv$        |  |  |
|          | 5  |  |  |  | _                                   | _          | -  | _  | -  | $\dashv$        |  |  |
|          |  | 777  | Н  |  | _                                   | -          |  |  |  | $\dashv$        |  |  |
|          | (7)  | 1  | М  |  |                                     |            |  |  | $\vdash$   |                 |  |  |
|          | 6<br>7<br>8<br>9                           | 1  | М  |  | _                                   |            |  |  |  | П               |  |  |
|          | 9  | 1  |  | _  |                                     |            |  |  |  |                 |  |  |
|          | 10   | 1  |  |  | ľ                                   | 1          |  |  |  |                 |  |  |
|          | 11   | 1  |  |  |                                     |            |  |  |  |                 |  |  |
|          | 12   | 1  |  |  |                                     |            |  |  |  | Ш               |  |  |
|          | 12<br>13<br>14                             | 1  |  |  |                                     |            |  | _  | lacksquare                                       |                 |  |  |
|          | 14   | 1  | _  |  |                                     | _          | Щ  | Щ  |  |                 |  |  |
|          | 15 (13) (13) (13) (13) (13) (13) (13) (13) | 27   |  |  | _                                   | <u> </u>   | L  | -  | _  | $\dashv$        |  |  |
| <u> </u> | 16   | _  | ⊢  | $\vdash$   |                                     | <b> </b> - | _  | ⊢  | H  | Н               |  |  |
|          | 100  | 0  | <del> </del>                                     | -  | _                                   | ┝          | <u> </u>   | -  | -  | Н               |  |  |
|          | 100  | 0  | -  | -  | -                                   |            | <u> </u>   | $\vdash$   | -  | $\vdash$        |  |  |
| $\vdash$ | (20)                                       | ij   | H  | -  | _                                   | ┝          | $\vdash$   | -  | -  | Н               |  |  |
|          | 21   | 1  |  | Н  |                                     | H          |  | -  | ┢  | Н               |  |  |
| $\vdash$ | 22   | 1  | $\vdash$   | <del>                                     </del> | -                                   | $\vdash$   | <del> </del>                                     | Н  |  | Н               |  |  |
|          | 22   | す  |  |  | _                                   |            | Т  |  | $\vdash$   | П               |  |  |
|          | 24   | 1  |  |  |                                     |            |  |  | $\vdash$   | П               |  |  |
|          | 24<br>25                                   | V  |  |  |                                     |            |  |  |  |                 |  |  |
|          | 26   | 1  |  |  |                                     |            |  |  |  |                 |  |  |
|          | 27   | 7 7  |  |  |                                     | L          |  | L  | _  | Ш               |  |  |
| L        | 28   | V  |  | _  | _                                   |            | <u> </u>   | L_   | <u> </u>   | Ш               |  |  |
|          | 29<br>30                                   | Y  |  |  |                                     | <u> </u>   | _  | L  | L  | Н               |  |  |
|          | 30   | -  |  | H  |                                     | ⊢          | _  | _  | <del> </del>                                     | $\vdash$        |  |  |
| <u> </u> | 31<br>32                                   | ⊢  |  | ⊢  | -                                   | ┢          | ┝╾   | _  | ┝  | Н               |  |  |
| $\vdash$ | 33   | $\vdash$   | $\vdash$   | ┝  |                                     | -          | ┝  |  | ┢╾   | H               |  |  |
| <u> </u> | 34   | $\vdash$   |  | $\vdash$   | $\vdash$                            | ╁          | $\vdash$   | _  | <del>                                     </del> | Н               |  |  |
|          | 35   | <del>                                     </del> |  | Ι  | $\vdash$                            | $\vdash$   | $\vdash$   | Т  | Г  | Н               |  |  |
|          | 36   |  | П  | _  | Т                                   | Г          | Т  |  | m  | П               |  |  |
|          | 37   |  |  |  |                                     |            |  |  |  |                 |  |  |
|          | 38<br>39                                   |  |  |  |                                     |            |  |  |  |                 |  |  |
|          | 39   |  |  | 匚  |                                     | oxdot      |  | <u> </u>   |  | Ш               |  |  |
| <u> </u> | 40   | <u> </u>   |  | _  | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | L          | L  | <u> </u>   | <u> </u>   | Щ               |  |  |
|          | 41   | <b> </b>   | $\vdash$   | $\vdash$   | ⊢                                   | $\vdash$   | $\vdash$   | <b> -</b>  | ├-   | $\vdash \vdash$ |  |  |
| ⊢        | 42   | ⊢  | -  | <u> </u>   | <del> </del>                        | -          | <del> </del>                                     | $\vdash$   | ⊢  | $\vdash$        |  |  |
|          | 44   | -  | <del>                                     </del> | <del> </del>                                     |                                     | -          | ├-   | ⊢  | ⊢  | Н               |  |  |
| $\vdash$ | 45   | $\vdash$   | $\vdash$   | ├  | ┢                                   | -          | ┢  | $\vdash$   | Η.   | $\vdash \vdash$ |  |  |
| $\vdash$ | 46   | ┢  | $\vdash$   | $\vdash$   | $\vdash$                            | $\vdash$   | <del> </del>                                     | <del>                                     </del> | <del> </del>                                     | Н               |  |  |
|          | 47   | Г  |  | Т  | 1                                   | Г          | <del>                                     </del> | Г  | Г  | М               |  |  |
|          | 48   |  |  |  |                                     | Г          |  |  |  | П               |  |  |
|          | 49   |  |  |  |                                     |            |  |  |  |                 |  |  |
|          | 50   |  |  | 匚  |                                     | 匚          |  |  |  |                 |  |  |
|          |  |  |  |  |                                     |            |  |  |  |                 |  |  |

|              | Claim          |          | Date     |          |              |            |               |  |              |          |  |  |
|--------------|----------------|----------|----------|----------|--------------|------------|---------------|--|--------------|----------|--|--|
|              |                |          |          |          |              |            |               |  |              |          |  |  |
| Final        | Original       |          |          |          |              | •          |               |  |              |          |  |  |
| Ξ            | Ö              |          |          |          |              |            |               |  |              |          |  |  |
|              |                |          |          |          |              |            |               |  |              | _        |  |  |
|              | 51<br>52<br>53 | _        |          |          |              |            |               |  |              |          |  |  |
|              | 52             | Н        | -        |          |              |            | Н             |  | -            | $\dashv$ |  |  |
|              | 54             | $\vdash$ | Н        | -        |              |            | -             | -  | -            | $\dashv$ |  |  |
|              | 54<br>55       |          | -        | _        |              |            | $\vdash$      |  | -            | $\dashv$ |  |  |
|              | 56             | Н        | _        |          |              |            | _             |  | $\vdash$     | $\vdash$ |  |  |
|              | 57_            | _        |          |          |              | _          | ·             |  |              |          |  |  |
|              | 58             |          |          |          |              |            |               |  |              |          |  |  |
|              | 59             |          |          |          |              |            |               |  |              |          |  |  |
|              | 60             |          |          |          |              |            |               |  |              |          |  |  |
|              | 61             | L        | Ш        |          | Ш            | Щ          | Щ             |  | $oxed{oxed}$ | Щ        |  |  |
|              | 62<br>63       | H        | <b> </b> | <u> </u> | <u> </u>     | L          | <u> </u>      | ļ  | <u> </u>     | <u> </u> |  |  |
|              | 63             | _        | -        | -        | -            | H          | <b>-</b>      | H  | Н            | $\dashv$ |  |  |
|              | 64<br>65       | H        | -        | H        | $\vdash$     | $\vdash$   | $\vdash$      | $\vdash$   | Н            | $\vdash$ |  |  |
|              | 66             | -        |          | H        | $\vdash$     | $\vdash$   | $\vdash$      | $\vdash$   | $\vdash$     | $\vdash$ |  |  |
|              | 67             | $\vdash$ | -        |          | $\vdash$     | -          |               | ┢═   | -            | М        |  |  |
|              | 68             | Н        |          | Т        |              |            |               | $\vdash$   | Г            | Н        |  |  |
|              | 69<br>70       |          |          |          |              |            |               |  |              |          |  |  |
|              | 70             |          |          |          |              |            |               |  |              |          |  |  |
|              | 71<br>72<br>73 |          |          |          |              |            |               |  |              |          |  |  |
|              | 72             |          | Ш        | L        | L            | L          | L             | _  | ldash        | Щ        |  |  |
|              | 73             |          |          | <u> </u> | <u> </u>     |            | <u> </u>      | ļ  | <u> </u>     | Н        |  |  |
|              | 74<br>75       | _        |          | ┝        | <u> </u>     | <u> </u>   | ┡             | _  | -            | $\vdash$ |  |  |
|              | 76             | -        | -        | -        | ┝            | ┝          | -             | <del> </del>                                     | $\vdash$     | Н        |  |  |
|              | 76<br>77       | <u> </u> |          | $\vdash$ | -            | H          | H             | $\vdash$   | $\vdash$     | Н        |  |  |
|              | 78             | -        | -        |          |              | $\vdash$   | $\vdash$      | <del>                                     </del> | $\vdash$     | Н        |  |  |
|              | 78<br>79       |          |          |          | _            |            |               | $\vdash$   |              |          |  |  |
|              | 80             |          |          |          |              |            |               |  |              |          |  |  |
|              | 81             |          |          |          |              |            |               |  |              |          |  |  |
|              | 82             |          |          | ·        |              | <u> </u>   | _             | L_   | ļ            | Щ        |  |  |
| ļ            | 83             | <u> </u> |          | L        | <u> </u>     | <u> </u> _ | <u> </u>      | <u> </u>   | <u> </u>     | Щ        |  |  |
| <u> </u>     | 84             | ⊢        | $\vdash$ | $\vdash$ | ⊢            | ⊢          | H             | $\vdash$   | $\vdash$     | Н        |  |  |
| <del> </del> | 85<br>86       |          | -        |          | -            | -          | <del> -</del> | ├-   |              | $\vdash$ |  |  |
|              | 87             | $\vdash$ | $\vdash$ | $\vdash$ | Η.           | ┝          | -             | $\vdash$   | $\vdash$     | Н        |  |  |
|              | 88             | ┢        | H        | $\vdash$ | $\vdash$     | $\vdash$   | ┢             | $\vdash$   | $\vdash$     | Н        |  |  |
|              | 89             | Г        |          | Т        | Г            |            | Г             | Т  |              | Н        |  |  |
|              | 90             |          |          |          |              | Ĺ          |               |  |              |          |  |  |
|              | 91             |          |          |          |              |            |               |  |              |          |  |  |
| <u> </u>     | 92             | _        | L        | <u> </u> | <u> </u>     | _          | L             | <u> </u>   | _            | Ш        |  |  |
| <u> </u>     | 93             | <b>—</b> | <u> </u> | ├_       | <del> </del> | ├_         | <u> </u>      | -  | <b></b>      | Ш        |  |  |
| <del> </del> | 94<br>95       | -        | -        | ┝        | ⊢            | -          | -             | ├  | -            | Н        |  |  |
| <u> </u>     | 96             | $\vdash$ | ⊢        | -        | ┝            | -          |               |  | -            | Н        |  |  |
|              | 97             | $\vdash$ | $\vdash$ | $\vdash$ | ┢╌           | H          | $\vdash$      | -  | $\vdash$     | Н        |  |  |
| <b></b> -    | 98             | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$   | $\vdash$      | ┢  | ·            | Н        |  |  |
|              | 99             |          |          |          |              |            |               |  |              |          |  |  |
|              | 100            |          |          |          |              |            |               |  |              |          |  |  |

| Te   Fig.   Fi | Claim  |         | Date   |              |                                     |  |  |              |             |               |          |  |
|--|--|---------|--|--------------|-------------------------------------|--|--|--------------|-------------|---------------|----------|--|
| 101  |  |         |  |              |                                     |  |  |              |             |               |          |  |
| 102   103   104   105   106   107   108   109   110   111   112   113   114   115   116   117   118   119   120   121   122   123   124   125   126   127   128   129   130   131   132   133   134   135   136   137   138   139   140   141   142   143   144   145   146   147   148   149  | Final  | Origina |  |              |                                     |  |  |              |             |               |          |  |
| 102   103   104   105   106   107   108   109   110   111   112   113   114   115   116   117   118   119   120   121   122   123   124   125   126   127   128   129   130   131   132   133   134   135   136   137   138   139   140   141   142   143   144   145   146   147   148   149  |  | 101     |  |              |                                     |  |  |              |             |               |          |  |
| 104 105 106 107 108 109 110 111 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149  |  | 102     |  |              |                                     |  |  |              |             |               |          |  |
| 105  |  | 103     |  |              |                                     |  |  |              |             |               |          |  |
| 106  |  | 104     |  |              |                                     | _  | Щ  | Ш            |             |               | Ш        |  |
| 107  |  | 105     | $\vdash$   |              | _                                   | _  | $\vdash$   | ш            | $\vdash$    |               | _        |  |
| 108         109         110         111         112         113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  | •  | 106     | -  | _            |                                     | _  |  | Н            | -           |               | -        |  |
| 109  |  | 107     | Н  |              | -                                   |  | $\vdash$   |              | Н           |               | Н        |  |
| 110         111         112         113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  |  | 109     | Н  |              |                                     |  | $\vdash$   |              | _           |               | $\vdash$ |  |
| 111         112         113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  |  | 110     |  |              |                                     |  | $\vdash$   |              |             | $\overline{}$ | Н        |  |
| 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 111     |  | _            |                                     |  |  |              |             |               |          |  |
| 113         114         115         116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148         149  |  | 112     |  |              |                                     |  |  |              |             |               |          |  |
| 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 113     |  |              |                                     |  |  |              |             |               |          |  |
| 116         117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148         149  |  | 114     | Ĺ  |              |                                     | _  | oxdapsilon                                       | <u> </u>     |             | _             |          |  |
| 117         118         119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148         149  |  | 115     |  |              | L.                                  |  | L.,  |              |             |               |          |  |
| 119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  |  | 116     | _  | -            | _                                   | _  | -  |              | _           | _             | Н        |  |
| 119         120         121         122         123         124         125         126         127         128         129         130         131         132         133         134         135         136         137         138         139         140         141         142         143         144         145         146         147         148  |  | 117     |  | ⊢            | <del> </del>                        |  | -  | $\vdash$     | _           | -             | Н        |  |
| 121 122 123 124 125 126 127 128 129 130 131 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 110     | $\vdash$   | ┝            | $\vdash$                            |  | $\vdash$   | $\vdash$     |             | H             | Н        |  |
| 121 122 123 124 125 126 127 128 129 130 131 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 120     |  | ┝            | ├─                                  | -  |  | <del> </del> | _           |               | Н        |  |
| 122  |  | 121     | H  | $\vdash$     | $\vdash$                            | <del>                                     </del> |  |              | <del></del> | т             | Н        |  |
| 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 122     |  | Т            |                                     | $\vdash$   |  | $\Box$       |             |               | П        |  |
| 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 123     |  |              |                                     |  |  |              |             |               |          |  |
| 126 127 128 129 130 131 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148  |  | 124     |  |              |                                     |  |  |              |             |               |          |  |
| 129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 125     | L  | L            | Ш                                   |  |  |              |             | <u> </u>      | Щ        |  |
| 129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 126     | <u> </u>   | lacksquare   | _                                   | _  |  | $oxed{oxed}$ |             | <u> </u>      | Н        |  |
| 129<br>130<br>131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 127     | -  | <u> </u>     | <b> </b>                            |  | -  | ├-           | -           |               | Н        |  |
| 131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 120     | ⊢  | -            | H                                   | H  | $\vdash$   | $\vdash$     | _           | ├             | Н        |  |
| 131<br>132<br>133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 130     | -  | _            | ┢                                   |  | Н  | $\vdash$     | _           | $\vdash$      | Н        |  |
| 133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 131     | -  | <u> </u>     | -                                   | _  | Н  | -            |             |               | H        |  |
| 133<br>134<br>135<br>136<br>137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 132     | П  |              | Г                                   |  |  |              |             | $\overline{}$ | П        |  |
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| 137<br>138<br>139<br>140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   |  | 135     | <u> </u>   | <u> </u>     |                                     | _  | _  | <u> </u>     | <u> </u>    |               | Ш        |  |
| 138  |  | 136     | H  | dash         | <u> </u>                            | L  | <del> </del>                                     | $\vdash$     | Ŀ           | $\vdash$      | Н        |  |
| 140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148<br>149   | <u> </u>   | 13/     | H  | ⊢            | H                                   | _  | -  | -            | <u> </u>    | ⊢             | $\vdash$ |  |
| 140<br>141<br>142<br>143<br>144<br>145<br>146<br>147<br>148<br>149   | <u> </u>   | 130     | ┝  | ┝            | ├                                   | $\vdash$   | ├  | $\vdash$     | $\vdash$    | $\vdash$      | Н        |  |
| 141<br>142<br>143<br>144<br>145<br>146<br>147<br>148   | <del>                                     </del> | 140     | <del>                                     </del> | <del> </del> |                                     | $\vdash$   | <del>                                     </del> | $\vdash$     | $\vdash$    | $\vdash$      | $\vdash$ |  |
| 142<br>143<br>144<br>145<br>146<br>147<br>148  |  | 141     | <del>                                     </del> | $\vdash$     | $\vdash$                            | $\vdash$   | Г  | Т            | Г           | $\vdash$      | Н        |  |
| 143<br>144<br>145<br>146<br>147<br>148   |  | 142     |  |              |                                     |  |  |              |             |               |          |  |
| 145  |  | 143     |  |              |                                     |  | 匚  |              |             |               |          |  |
| 146  |  |         |  | L            | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | L  |  | oxdot        | L           | <u> </u>      | Ш        |  |
| 147<br>148<br>149  | <u> </u>   |         | <b>—</b>   | -            | <u> </u>                            | <u> </u>   | <b>—</b>   | ⊢            | <u> </u>    | <u> </u>      | Н        |  |
| 148  | <u> </u>   |         | <del>                                     </del> | <b>—</b>     | -                                   | -  | -  | <del> </del> | ⊢           | ⊢             | Н        |  |
| 149  |  | 1/12    |  | -            | $\vdash$                            | ⊢  | -  | ┝            | $\vdash$    | $\vdash$      | Н        |  |
| 150  | <del> </del>                                     |         | <del>                                     </del> | $\vdash$     | -                                   | ⊢  | $\vdash$   | $\vdash$     | Η.          | -             | Н        |  |
|  | <b> </b>   | 150     |  | <u> </u>     |                                     | <del>                                     </del> | Г  |              | Г           | T             | Н        |  |